



February 14, 2014

Mr. Christopher Chafee, Senior Counsel  
**Governor's Office of Planning and Research**  
1400 Tenth Street  
Sacramento, CA 95814

Re: Preliminary Evaluation of Alternative Methods of Transportation Analysis for CEQA

Dear Mr. Chafee:

The Intelligent Transportation Society of California (ITS California) has received and reviewed the Office of Planning and Research (OPR) "Preliminary Evaluation of Alternative Methods of Transportation Analysis", dated December 30, 2013. We appreciate the opportunity to provide suggestions regarding your efforts to amend the California Environmental Quality Act (CEQA) Guidelines, as required by Senate Bill 743 (SB 743).

The Intelligent Transportation Society of America (ITS America) is the nation's largest organization dedicated to advancing the research, development and deployment of Intelligent Transportation Systems (ITS) to improve the nation's surface transportation system. ITS California is a State Chapter and our goal is to promote the use of advanced transportation systems throughout California. We represent hundreds of manufacturers, consultants and government agencies in California.

We understand that the new CEQA guidelines will be encouraging the reduction of greenhouse gas emissions and the development of multi-modal transportation networks. Our purpose of writing this letter is to recommend project measures that will allow proven ITS solutions to be considered as potential mitigations.

ITS technologies were developed do "do more with less." Their intent is to make the transportation network work more efficiently by enabling smarter route choice, intelligent ramp controls, smarter signal timing, etc. ITS technologies promote better accessibility to existing transportation networks by making them more efficient, safer, and multimodal. Every day, agencies throughout California continue to implement ITS technologies on their freeways, roadways, intersections, transit facilities and vehicles, and parking facilities to promote better utilization of existing infrastructure. ITS California suggests that the use of the following measures would enable a broader range of mitigation measures to be considered than current methods permit:

**Adherence to an Adopted ITS Plan:** ITS technologies have an effect on transportation network efficiency that is often subtle and difficult to measure. Measuring this effect would potentially violate OPR need for simplicity in CEQA guidelines. In lieu of specific measures, we recommend simply that projects be measured based on their adherence to an adopted local, regional or statewide (as appropriate to the

project ) ITS plan. Local agencies will need to formulate ITS plans that are carefully developed to address transportation management needs across modes, and the only need for CEQA would be to measure conformance with such a plan.

We also ask that OPR consider some specific measures in their new CEQA guidelines, as highlighted below.

**Fuel Use:** We understand fuel use is already under consideration by OPR has a project measure. We support that as a measure, for fuel use is directly linked with travel speed and delay, but also with travel mode. ITS technologies promote steady traffic flow, and also improve (through signal timing and priority) the efficiency of non-auto based trips.

**Travel Time Reliability (by mode):** Fuel consumption and GHG's emitted in transportation are highest when traffic is either in a stop-and-go condition or when they are freely flowing at high speeds. ITS technologies promote traffic flow in a steady (sometimes slow) state, which is the "sweet spot" for GHG emission. ITS technologies can also provide direct benefits in terms of travel time itself, but we understand that mitigations to travel time could be biased towards capacity expansion.

ITS Technologies that benefit travel time reliability and fuel use include:

- **Ramp metering** – Ramp meters control the demand on freeways by holding back on-ramp traffic. In this manner, ramp meters maintain a steady, reliable, efficient state of flow on the freeway mainline.
- **Bus Rapid Transit (BRT) Systems** – Uses ITS technologies to prioritize transit vehicles along corridors, reducing stops and allowing for more reliable transit service in dense urban areas.
- **Integrated Corridor Management (ICM)** – Uses ITS technologies to coordinate traffic operations on major freeways and adjacent corridors to allow for reliable traffic flow, especially during incidents. ICM technologies enable the management of roadway capacity across facilities and modes.
- **Advanced Traveler Information Systems** – ITS such as 511 systems allow for travelers across modes to make travel decisions before and during their trip to make best use of available network capacity.
- **Active Traffic Management (ATM)** – Using ITS technology, these systems dynamically control traffic supply based on real-time roadway conditions and demand.
- **Traffic Signal Synchronization** – ITS technologies, such as advanced controllers and detection, allow traffic signals to adapt their operation according to traffic demand and according to how adjacent signals are operating. Signal timing has been proven to reduce stops, delays, and vehicle emissions.

**No. of trips at risk of incidents:** The CDC reports that motor vehicle crashes are the leading killer of children, teens, and young adults and among the top ten causes of death for all ages. Over 30,000 people are killed in crashes each year in the United States, resulting in over \$40 billion annually in medical and work loss costs. Incidents are responsible for half of traffic congestion on freeways and roadways. ITS technologies that prevent incidents include:

- **Roadway Weather Information Systems** that broadcast dangerous weather conditions (e.g. fog, ice)
- **Connected Vehicle** and Infrastructure communication which allow vehicles to "talk" with each other and with the infrastructure, preventing accidents when humans cannot.

- **Incident management** technologies enable much faster detection of, and response to, traffic-related incidents
- **Traffic signal timing** can allow signals to adapt to demand, preventing rear-end collisions.
- **Vehicle detection** at traffic signals allows signals to adapt their operation to demand from bicycles, pedestrians and transit vehicles.

This measure would require establishment of a risk factor based on predicted frequency and severity of incidents. In addition to the ITS technologies mentioned above, such a measure would encourage more use of active modes, and would encourage implementation of better transportation designs.

**Parking Utilization:** Parking availability by itself has historically not been considered a project impact under CEQA. However, the "hunting" for parking that can result from insufficient parking supply can have environmental implications. ITS technologies such as Parking Management Systems provide dynamic information and routing to available parking, thereby reducing congestion and emissions due to this "hunting" behavior.

There additional ITS solutions that can be applied to a variety of projects with the goal to provide safe and efficient roadway systems, and reduction of vehicle emissions. In addition, ITS can provide operational performance measures to validate travel demand improvements in real time.

ITS California looks forward to the development of alternative measures using ITS solutions for reduction of greenhouse gas emissions and establishment of multimodal transportation networks. ITS California is ready to assist OPR in the development of the CEQA guidelines by presenting and discussing these alternatives.

This letter was prepared by ITS California's SB 743 Task Force. Feel free to contact me with future correspondence, and/or if you desire clarification on the contents of this letter. We look forward to working with OPR to develop the revised CEQA guidelines.

Sincerely,



Josh Peterman  
Chair, ITS California  
(925) 357-3368  
[www.itscalifornia.org](http://www.itscalifornia.org)